DOCUMENT RESUME

ED 177 100 SP 014 034

TITLE Consumer Product Safety: What's It All About? Teacher's Guide. No. 8-T.
INSTITUTION Consumer Product Safety Commission, Washington, D.C.
PUB DATE [79]
NOTE 25p.
AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. ($1.00)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Accident Prevention; *Consumer Protection; Grade 4; Grade 5; Grade 6; Health; *Health Activities; *Injuries; Intermediate Grades; Safety; *Safety Education; Teaching Methods

ABSTRACT

Designed as a flexible resource, this material may be used independently or in conjunction with existing safety, health, consumer education, economics, or social studies units. To facilitate the incorporation of product safety information into the curriculum, the suggested activities section lists major concepts to be developed and indicates related, interdisciplinary skills. Each unit contains a list of learning objectives, a teacher's guide, a consumer product safety vocabulary list, suggested activities, including safety-oriented crossword puzzles, and a list of resources. Area office listings for the Consumer Product Safety Commission are included. The material is intended for grades 4-6. (Author/LH)

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PRODUCT SAFETY EDUCATION
U.S. CONSUMER PRODUCT SAFETY COMMISSION

CONSUMER PRODUCT SAFETY: What's it all about?

NO. 8-T

TEACHER'S GUIDE

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U.S. DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

Each year in the United States, approximately 21 million people are injured and around 25,000 killed in home accidents. The majority of these injuries and deaths are product-related. The annual cost of home injuries exceeds 5.6 billion dollars.

Congress recognized the urgent need for Federal regulations to ensure safer consumer products when it passed the Consumer Product Safety Act in 1972. The Act called for the creation of a new, independent Federal regulatory agency. The U.S. Consumer Product Safety Commission was activated on May 14, 1973 and directed by Congress to:

- *protect the public against unreasonable risk of injury associated with consumer products;*
- *assist consumers in evaluating the comparative safety of consumer products;*
- *develop uniform safety standards for consumer products and to minimize conflicting State and local regulations;*
- *promote research and investigation into causes and prevention of product-related deaths, illness, and injuries.*

The Commission has jurisdiction over more than 10,000 products used in the home, school, and public places. In its efforts to protect the public from serious product-associated injuries, the Commission needs the help of every consumer, young and old.

The information in this Product Safety Unit has been adapted from Consumer Product Safety Commission fact sheets and other publications. A complete list of these publications, a Listing of Education Materials For Use by Schools, and ordering information can be obtained by writing to: the U.S. Consumer Product Safety Commission, Washington, D.C. 20207, or by calling the toll-free consumer hotline: 800-638-8326. Maryland residents only, call: 800-492-8363; Alaska, Hawaii, Puerto Rico, and the Virgin Islands, call: 800-638-8333. A teletype hotline for the deaf also is available during working hours.

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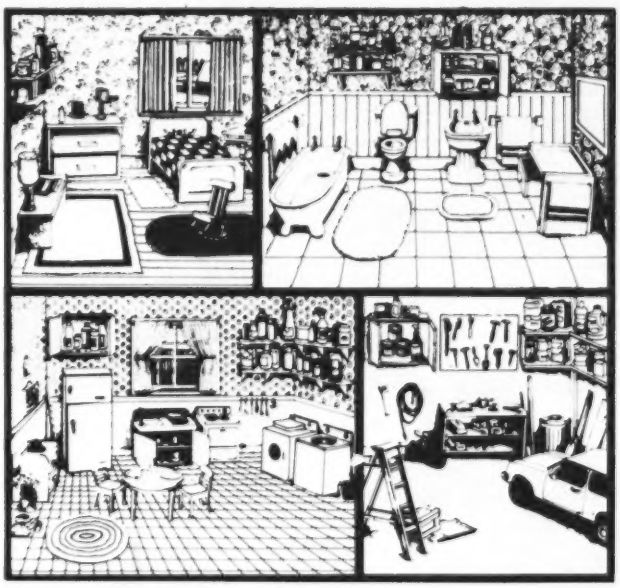
CONSUMER PRODUCT SAFETY: What's it all about?

A GUIDE FOR TEACHERS OF GRADES 4-6

PURPOSE OF THE MATERIALS

Each year in the United States approximately 21 million people are injured and nearly 25,000 killed in home accidents. The U.S. Consumer Product Safety Commission estimates that over 3 million young people under age 14 are treated each year in hospital emergency rooms for consumer product-related injuries. Some of these youngsters are treated and released quickly. Others remain in the hospital for weeks or months. Still others become handicapped for life. Some children die.



Many of these injuries and deaths may be traced to human behavioral factors rather than to product deficiencies. Although they can not be completely protected from defective products or daily environmental hazards, the young can be alerted to the possibility of product-related injury and

encouraged to develop habits which will help to insure their safety. Understanding the potential hazards associated with the products they commonly use and learning to take simple steps to prevent injuries will allow children to protect themselves and their families.

The U.S. Consumer Product Safety Commission (CPSC) has designed this education unit to assist teachers in presenting the principles of consumer product safety to students in grades four through six. The unit aims to increase students' awareness of product safety in two ways: (1) by teaching them to be aware of potential hazards associated with consumer products; and (2) by teaching youngsters to safely select, use, maintain, store, and dispose of these products.

Designed as a flexible resource, this material may be used independently or in conjunction with existing safety, health, consumer education, economics, or social studies units. To facilitate the incorporation of product safety information into the curriculum, the Suggested Activities section lists major concepts to be developed and indicates related, interdisciplinary skills. The unit includes Learning Objectives, a Teacher's Guide, a Consumer Product Safety Vocabulary List, Suggested Activities, and a List of Resources.

LEARNING OBJECTIVES

At the completion of this unit students should:

1. Understand the concept of product safety and be able to
    a. Compare "person," "product," and "environmental" factors
    b. Interpret the relationship between consumer, product, and environment with regard to accident situations
    c. Explain the difference between acceptable risk and potential hazard
    d. Provide examples of the hazards associated with a product
2. Apply principles of safety in the
    - selection
    - use
    - maintenance
    - storage
    - disposal

    of consumer products.
3. Know where to go for consumer assistance and be able to
    a. Match three government agencies with their functions
    b. Compile a listing of agency phone numbers and addresses to use as a reference tool
    c. Write to the appropriate agency requesting safety information about a particular product
    d. Write a consumer/complaint letter to a Federal agency
4. Share their knowledge with others

TEACHER'S GUIDE

I. Person, Product, Environment: Recognizing Hazards

To introduce this unit, the teacher first may want to establish some definitions. Students will need to understand terms like "consumer products," "hazard," and "risk" before they can readily investigate accident situations. To help stimulate thinking about consumer product safety, Activity I:1 provides a consumer product safety diagnostic quiz. Discussion of the results of this quiz should promote student involvement with the subject and begin to establish a vocabulary list, similar to the Consumer Product Safety Vocabulary List provided for teachers at the end of the unit.

Student investigation of terms and accident situations should reveal the three factors which usually contribute to a consumer product-related accident:

- the person (consumer or user)
- the product, and
- the environment.

Although these three factors may be involved in varying degrees, person (user) factors are responsible for causing most injuries. Students may want

to discuss their responses to questions 7 and 8 on the diagnostic quiz and describe any product-related accidents they may have experienced in an effort to assign causality to either person, product, or environment.

As a result of discussion, students should begin to realize that the issue--Who is responsible for product safety?--is complex. They will appreciate that as buyers and consumers of products, they, by their behavior, largely determine the safe use of those products. But more than that, they will see that product safety is based on many human factors: the sensible and careful use of products where risk is involved; a consideration of the age and condition of a product; the use of a product by someone qualified by skill, age, or experience to use it; and the proper storage and disposal of materials. These "person" factors are discussed more fully in Section II.

In addition to such human factors, environmental factors may contribute to an accident situation. The relationship of the environment to an accident is complex, and must be viewed from a wide perspective. Weather, lighting, noise, ventilation, and many other environmental conditions may contribute--directly or indirectly--to an accident situation. A slippery floor, which might precipitate a fall, or a patch of broken pavement, which could cause a skateboard to stop abruptly, directly contributes to an accident. However, if a person trips while climbing a dimly lit staircase, we might cite the poor lighting as an indirect cause of the accident; in this situation, the lighting, an environmental factor, has modified human factors by affecting the ability to see clearly.

Of course students should not be expected to analyze the many particular factors which might contribute to a product-related injury. However, through the conceptual model of the safety triad--person, product, environment--students may become more aware of the relationship of these factors, and evidence their awareness in safer behavior.

Towards this end, students need also to recognize the ways in which products may be dangerous and gauge their use of products accordingly. Some products, because of the job they must do, involve some degree of *risk*. Knives must be sharp to cut efficiently; ladders must be long to reach high places. A responsible consumer judges the risks associated with a product and decides, before using the product, whether or not he is willing to assume those risks. Other products may be dangerous in themselves because they have become faulty: a TV set with a shorted-out wire could start a fire; a skateboard with a cracked wheel could cause a fall. Such products should be discarded or repaired by a qualified repair person.

Finally, some products are classified as hazardous and may require special labeling or instructions designed to alert consumers to potential dangers and to provide information on proper use. The Federal Hazardous Substances Act, one of the five acts administered by CPSC, sets forth certain criteria to determine whether a product is or is not a hazardous substance. A product may be defined as a hazardous substance if it is *toxic; flammable; corrosive;* an *irritant;* a *strong sensitizer;* or if it *generates pressure* and thus can cause substantial personal injury or risk.** If a product is determined to be a hazardous substance, the product must be labeled in accordance with the Federal Hazardous Substances Act, so that consumers will be alerted to the potential dangers of the product.

Many potential hazards, such as electricity, high surface temperatures, sharp edges, or poisonous chemicals appear in a broad range of products. These hazards can be divided into four general categories: thermal, electrical, mechanical, and chemical.

1. **THERMAL HAZARDS**--Thermal hazards can develop from fire and heat sources. Some of the hazards are obvious, such as getting clothing too close to the flame of a gas stove, or dropping a match on a bathrobe. But others may be less obvious, such as flammable vapors from gasoline being ignited by the distant pilot light of a gas water heater. Hot cooking utensils and even hot water in a bathtub can cause burns.

2. **ELECTRICAL HAZARDS**--Electrical fire hazards develop when circuits are overloaded (as when too much current flows through wiring). Electrical shock hazards can develop when current leakage occurs (because of a short circuit, or an appliance malfunction) and current flows through the body. The most common injuries resulting from accidents involving electrical hazards are burns and shock, both of which can have lasting, damaging physical effects.

3. **MECHANICAL HAZARDS**--Mechanical hazards include sharp edges, sharp points, poorly balanced products (such as some high chairs), and slippery walking surfaces. These hazards may be the most frequent, since so

many products can cause falls or cuts. The most common injuries resulting from accidents involving mechanical hazards are relatively minor: cuts, bruises, and fractures. But some accidents involving mechanical hazards can result in death. After automobile accidents, the most frequent cause of accidental death is falls, falls which frequently result from mechanical hazards in and around the home.

4. **CHEMICAL HAZARDS**--Certain household products such as cleaners, bleaches, flammable liquids, and paint solvents contain ingredients which may present chemical hazards if directions for use are not followed, if adequate precautions are not taken, or if the product is intentionally misused. These products may be toxic if ingested, inhaled, or absorbed through the skin. They may be corrosive or an irritant to eyes or skin. In addition, some of these products may be flammable or create pressure through heat, or other means. An aerosol, for example, may present a chemical hazard if its directions for use are not followed. Carbon monoxide produced by fuel-burning appliances may present a chemical hazard, particularly if these appliances are used in a room with inadequate ventilation.

The Consumer Product Safety Act (CPSA), the Act which established CPSC and the primary regulatory authority for the Commission, gives CPSC the authority to set safety standards or to ban consumer products which present an unreasonable risk of injury. Under the CPSA, for example, the Commission has set safety standards for such products as matchbooks, swimming pool slides, and architectural glass and has banned lead-containing paint, unstable refuse bins, two asbestos-containing products and extremely flammable contact adhesives.

*To avoid confusion, the term "consumer product" has been used in this guide to refer only to those articles subject to the authority of the CPSC. Under the Consumer Product Safety Act, CPSC does not have jurisdiction over drugs and cosmetics (except in the establishment of safety packaging standards), food, tobacco and tobacco products, medical devices, motor vehicles, boats, airplanes, firearms, alcohol, and pesticides.

**The following explanation of terms is based on definitions provided in Section 2 of the Federal Hazardous Substances Act:

(a) TOXIC/HIGHLY TOXIC--A substance is toxic if it can cause injury or illness when ingested, inhaled, or absorbed through the skin. Highly toxic substances are those proven through laboratory testing to be particularly lethal.

(b) EXTREMELY FLAMMABLE/FLAMMABLE/COMBUSTIBLE--These three degrees of flammability are based on the conditions under which a substance will ignite or the rate at which it burns. Gasoline, for example, will ignite even at sub-zero temperatures and thus is extremely flammable. Substances with flashpoints above 150°F are not defined as flammable or combustible under the law.

(c) CORROSIVE--Corrosive substances cause destruction of living tissue on contact through chemical action. (Example: certain drain cleaners are corrosive.)

(d) IRRITANT--An irritant is a non-corrosive substance that produces inflammation of living tissue after immediate, prolonged, or repeated contact. (Example: some laundry detergents are eye and skin irritants.)

(e) STRONG SENSITIZER--Strong sensitizers may be divided into two groups. A strong *allergic* sensitizer will make some people extremely sensitive to its presence after an initial exposure. Thus a person who comes into contact with such a substance for the first time will show no ill effects, but on subsequent contact (even with an insignificant amount of the substance) may show a strong allergic reaction. After exposure to a strong *photodynamic* sensitizer, some people may become extremely sensitive to sunlight or its equivalent. The area of sensitivity may be general or limited to the point of contact with the sensitizer. (Example: formaldehyde is a strong allergic sensitizer.)

(f) A substance may generate pressure through heat, decomposition, or other means. (Example: aerosol cans.)

II. Responsibilities of the Consumer

Once students begin to appreciate the risks and hazards associated with some products and the role of the environment in using products safely, the responsibility of the consumer should be stressed.

Many consumer letters and hotline calls to CPSC relate stories of accidents possibly associated with the misuse of consumer products. Injury reports in Commission files also reveal that misuse contributes to numerous serious injuries that receive hospital emergency room treatment. Some types of misuse, such as neglecting to read and follow directions and warning labels, appear so frequently that they deserve to be emphasized.

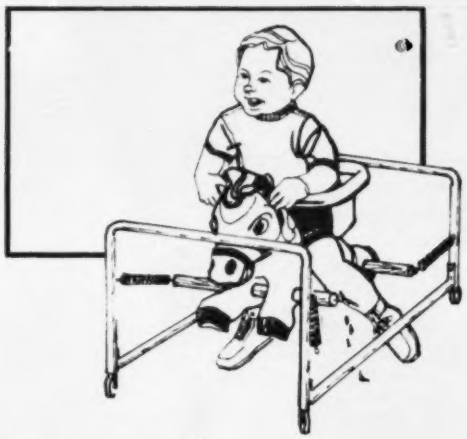
1. **IMPROPER MIXING**--Some products are hazardous if mixed together. For example, chlorine bleach mixed with ammonia, toilet bowl cleaners, and drain cleaners may release hazardous gases which can be fatal. Although chlorine bleach must be labeled clearly with a warning not to mix it with ammonia or toilet bowl cleaners, some people either do not read the label or disregard it. If the gases resulting from this mixture are inhaled, serious injuries or death can occur.

2. **OVER-USE**--Some people think that if a small amount is good, then a large amount must be better! In many cases, that kind of logic can lead to hazardous situations. Al-

ways follow directions and do *not* use more than the recommended amount.

3. **HASTE**--It is tempting to race through preliminary steps in order to use a product and get a job done. However, if speed means overlooking a loose part on a power mower or a safety guard on a power saw, stepping on a ladder without leveling it, or riding on a skateboard without first checking for environmental hazards--one can end up with a serious injury. Take the time to follow all preparatory steps.

4. **LACK OF MAINTENANCE**--Failure to repair broken products and lack of maintenance are important contributors to serious injuries. Wobbly bicycle wheels should be aligned, and broken straps on roller skates should be replaced before the equipment is used. Watch out for warning signals such as electrical sparks, flickering lights, or gas odors, and call for qualified service immediately. Complex machines, gas appliances, and electrical appliances should be repaired by experts.



5. **IMPROPER STORAGE**--Highly flammable liquids may produce heavier-than-air vapors which can travel invisibly along the floor and be ignited by a distant pilot light in a gas furnace or gas water heater, by a lighted cigarette, or by sparks from an electric motor. Therefore, flammable liquids should be stored outside living quarters, away from any ignition source. Drugs, poisons, and other hazardous products should be securely closed and stored out of children's reach, preferably in a locked cabinet; young children are resourceful and can get into cabinets which adults think are sufficiently safe. Products should be kept in their original containers and clearly labeled in order to prevent mistaking them for food or beverages. Mechanical or electrical appliances should be stored in a dry place to prevent rust or other deterioration. Aerosols, too, should be stored away from wet or damp areas; rust can lead to rupture or leakage of the aerosol contents.

It is easy for people to say "Be careful" and "Read the labels," but it is sometimes difficult for consumers to put these general recommendations into everyday practice. Here are some specific questions regarding consumer products to consider with students:

Selection:

- Is the product appropriate for the intended use and user? Are there some safer types of the same product which are preferable?

Use:

- Do you read the label and follow the directions? Are there any possible hazards (such as flammability, toxicity, and sharp parts) which you should be aware of? Are there some steps you can take to make the product safer? Should you restrict younger children from the area where you are using the product? Do you or your parents use products when you are tired or in a hurry?

Maintenance:

- Are there any broken, loose, worn, or dirty parts which should be repaired or replaced?

Storage

- Is the product stored dangerously near a flame, heat source, or within the reach of children? Is it in a sturdy, nonbreakable container; is the container clearly labeled? Is the product stored in a dry place to prevent deterioration caused by dampness?

Disposal:

- Can the product be burned, or should it be placed with nonburnable trash? Some self-pressurized containers, for example, may explode if burned.

III. Agencies That Protect the Consumer

Consumers *do* have a strong and active voice in setting product safety standards. A consumer who uses a product which he feels to be unsafe can complain to several agencies of the Federal government. Most of these agencies are eager to receive product safety information to help them build files

of statistics on which to base necessary action. Students should know where to go for consumer assistance and should have the opportunity to role-play a consumer complaint telephone call and to practice writing letters of complaint or requests for product safety information.

The following brief descriptions of six government agencies that work in the interest of consumers are provided as a teacher reference. Although the total responsibility of each agency is not outlined here, the descriptions should provide students with a basic understanding of each agency's area of jurisdiction.

U.S. Consumer Product Safety Commission (CPSC)
Washington, D.C. 20207
Toll free hotline: 800-638-8326
Maryland residents only: 800-492-8363
Alaska, Hawaii, Puerto Rico, and the Virgin Islands: 800-638-8333
A teletype hotline for the deaf is available during working hours.

CPSC's primary goal is to substantially reduce injuries associated with consumer products--products produced or distributed for sale to or use by consumers in or around homes, schools, recreational areas or otherwise. The term "consumer product," as it is defined under the Consumer Product Safety Act (CPSA) which established CPSC, does not include food, drugs, cosmetics, tobacco and tobacco products, medical devices, motor vehicles, boats, airplanes, firearms, alcohol, and pesticides. Under the CPSA, therefore, CPSC does not have jurisdiction over these products. However, the Commission does monitor over 10,000 consumer products--from architectural glass, stairs, power tools, and lawnmowers to stoves, skateboards, and hair dryers.

Congress has directed CPSC to protect the public against unreasonable risks of injury associated with consumer products; to assist consumers in evaluating the comparative safety of consumer products; to develop uniform safety standards for consumer products and minimize conflicting state and local regulations; and to promote research and investigation into the causes and prevention of product-related deaths, illnesses, and injuries. In addition to administering the Consumer Product Safety Act, CPSC administers the Flammable Fabrics Act, the Refrigerator Safety Act, the Federal Hazardous Substances Act, and the Poison Prevention Packaging Act.

Food and Drug Administration (FDA)
Department of Health, Education, and Welfare
5600 Fishers Lane
Rockville, Md. 20857
301-443-3170

FDA enforces the Federal Food, Drug, and Cosmetic Act and related laws to insure the purity and safety of foods, drugs, and cosmetics, the safety of therapeutic devices, and the truthful, informative labeling of such products. FDA also enforces radiation safety standards for products such as X-ray equipment, color televisions, lasers, sunlamps, and microwave ovens.

National Highway Traffic Safety Administration (NHTSA)
Department of Transportation
400 7th Street, S.W.
Washington, D.C. 20590
202-426-9550
Toll free hotline: 800-424-9393

NHTSA writes and enforces safety standards for automobiles, trucks, buses, recreational vehicles, motorcycles, and all related accessory equipment.

Federal Trade Commission (FTC)
6th and Pennsylvania Avenue, N.W.
Washington, D.C. 20580
202-962-0151

Unlike CPSC, FDA, and NHTSA, the FTC is not involved in the safety of products. FTC protects the consumer by enforcing antitrust laws and consumer protection statutes including those prohibiting false advertising and fraud in credit (lending). The agency also requires labeling on various products, such as care labeling for fabrics.

Occupational Safety and Health Administration (OSHA)
Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210
202-523-8151

OSHA has responsibility for safety and health in workplaces with one or more employees.

Office of Consumer Affairs
Executive Office Building
17th and Pennsylvania Avenue, N.W.
Washington, D.C. 20201
202-245-6093

The Office of Consumer Affairs, under the Department of Health, Education, and Welfare, provides advice to the President concerning consumer affairs. The Office serves as a coordinator for inquiries and complaints on subjects such as high prices, poor quality, and the safety of products.

SUGGESTED ACTIVITIES

I. Person, Product, Environment: Recognizing Hazards

Concept to be Developed	Procedure	Related Skills
consumer consumer product environmental factors product hazard risk of injury consumer product safety	1. Conduct a *mini* consumer product safety education diagnosis by giving a quiz. (See quiz at the end of this Activities section.) Discussion of quiz results will stimulate thinking about consumer product safety.	increasing vocabulary and language skills; practicing test-taking skills
	2. Questions for class discussion: -What is a product-related injury? -Have you ever had a product-related injury? -How did it happen? How could it have been avoided? -What are some reasons why consumer product-related injuries occur to youngsters? -What are some of the ways youngsters can avoid consumer product-related injuries?	
	3. Assign committees or invite the entire class to bring in newspaper clippings relating to product safety. Establish a product safety file or scrapbook. Students may determine filing categories, e.g., Product-Related Injuries; Community Safety Programs; Activities of Consumer Agencies, etc.	using the newspaper as a research tool; classifying and organizing information
	4. Students can conduct a survey of other classes to determine the incidence of product-related accidents, the most susceptible age groups, the products most frequently involved, etc. Explain that the survey involves 3 steps: (1) gathering information; (2) organizing the information and drawing conclusions; (3) reporting the information. Tell students what they will need to do to complete each step of the survey before they begin the activity.	
frequency of and tendencies toward product-related injuries	Discuss with students what questions need to be answered when they interview people. On the chalkboard or a large sheet of paper, compile collected data into an organization chart. When all the information has been organized on the chart, ask students to draw some conclusions from it. Guide students in writing a survey report. The report should include: what the students wanted to find out; who was interviewed; what the results were; and why students think the results came out as they did. The finished report could be displayed in the classroom or published in the school newspaper.	understanding the use of surveys; conducting a survey; evaluating "statistical" evidence; organizing data and writing reports
	5. Invite a speaker to address the class. Some ideas for speakers and topics are: -A nurse or doctor from the hospital emergency room, a rescue worker, or a fireman to talk about product-related injuries and discuss safe behavior; -A local manufacturer of a consumer product to speak to several classes about safe behavior around the product he produces and what he does to make his product(s) safe for consumers. -A CPSC representative from the Area Office (see list of Area Offices at the end of this unit) to speak on product safety education in general, and/or product safety in the home, school, and community.	enriching listening skills; hosting a speaker

II. Responsibilities of the Consumer

Concept to be Developed	Procedure	Related Skills
proper selection	1. Ask the entire class to list products which they would like to own, e.g., skateboards, swing sets, bicycles, chemistry sets, etc. Divide the class into groups; ask each group to choose a product to examine. Have groups brainstorm the hazards, investigate brands or varieties (by asking parents or using library resources), and make a selection. Allow groups to present their findings to the class.	judging and choosing alternatives
	2. Have students make advertisements for a product of their choice. They may write jingles, slogans or radio dialogues, or may create a visual advertisement using original drawings, magazine pictures, etc. Make sure they consider the use of the product, and direct their appeals toward a specific user audience.	using language persuasively; understanding the role of propaganda in advertising; creating an artistic, visual presentation
	3. Have students develop a guide on "Shopping With Safety in Mind." Items such as reading labels, looking for safety caps, etc., might be included.	
proper use	4. Have students bring in a favorite toy or piece of sports equipment and demonstrate proper use for the class. Make sure the presentation includes a recommendation for the age of the user, a discussion of any risks or hazards associated with the product, a consideration of appropriate environmental factors, and a demonstration of steps necessary to use the item safely.	addressing a group
	5. Students may want to produce a puppet show for kindergarten or primary grades. Puppets may be constructed from cutout pictures, or from clean, empty plastic bottles and containers attached to sticks. Students may write a script in which puppets complain that they are useful products and generally "good guys," but that they often are blamed for accidents unfairly; the real culprits are people who do not use products safely.	writing a dramatic script; using artistic skills
	6. Station students around a playground during a recess period. Supply students with notebooks and ask them to record any instances of unsafe play or use of equipment. Some examples they might watch for include standing on swings, pushing while climbing slide ladders, walking too close to moving swings, etc. Encourage class discussion of student observations; ask how younger children might be taught to use playground equipment safely. A Safe-Play Committee may be formed to play with kindergarten children during a recess period and "teach safe play by example."	fostering concern for younger children developing a sense of responsibility
	7. Have students invent a product and design a package or label for it. Make sure instructions for using the product safely are included along with appropriate hazard warnings.	
proper maintenance	8. Schedule one day as Bicycle Clinic Day, and invite a speaker from an adult education bicycle workshop or from a bicycle shop to address the class on the importance of bicycle maintenance. Students may be allowed to bring their own bicycles to school and, working together, check the bicycle for proper upkeep.	extending an invitation and hosting a speaker; working with peers
	9. Take a trip around the school, inside and outside, and identify any potential product hazards or defective equip-	

ment. How could these products be repaired or otherwise made safer? (Retrofitted)

10. As a research project, ask students to discover who is responsible for maintenance and upkeep of school/community grounds and equipment. For example, who is responsible for replacing broken or rusted swing chains at the local community playground? Who replaces light bulbs in fixtures above school staircases?

developing research skills; discovering resource people; appreciating community organization

proper storage

11. Have students make detailed lists of the contents of their home medicine chests, of the cabinets beneath the kitchen sink, or of a storage shelf in the basement or garage. Discuss the lists in class; what might be done to be sure that products are stored safely?

working with parents at home

12. Using a shoebox to represent a storage shelf or cabinet, have students construct models of safely-stored products. Models should be labeled with appropriate locations.

13. In class, develop a checklist for safely storing items at home. Students should investigate storage of: gasoline (in metal containers, away from heat sources, and outside living quarters); empty or unused trunks, refrigerators, cabinets, etc. (locked or securely fastened to prevent children from being trapped inside); paints and chemicals (placed out of reach of children).

14. Using magazine pictures, original drawings, or actual labels and small containers, construct a mobile of products which must be stored away from young children. Some examples to include are drugs, tools, scissors, cleansers, and poisons.

proper disposal

15. Discuss proper disposal for various products. Have students brainstorm a list of consumer products, then separate items into those which can be burned, those which must be placed with nonburnable trash, or contents which must be flushed away. Have students provide reasons for their groupings.

III. Agencies That Protect the Consumer

Concept to be Developed	Procedure	Related Skills
government protection of consumers; resources available to consumers	1. Discuss the issues of government involvement in consumer product safety. For example: Who is responsible for the safety of products used by consumers in the home and school? Should the government legislate product safety? How can this be done?	practicing debating skills
	2. As a library assignment have students research the responsibilities held by the U.S. Consumer Product Safety Commission, the Food and Drug Administration, and the Federal Trade Commission for protecting consumers.	using library references
	3. Have students view the slide presentation on the U.S. Consumer Product Safety Comm. and follow the slide show with a general discussion. The slides can be obtained from CPSC Area Offices and through the 27 outlets of Modern Talking Pictures. (See listings at the end of the unit.)	
	4. Role-play a consumer-complaint call between a consumer who has had an injury and the CPSC operator. Students should provide all pertinent information regarding the product and the accident situation.	
	5. Write a letter to the CPSC: a. Requesting Fact Sheets and other literature on a specific product to assist the consumer in making a wise, safe selection; or b. Complaining about a defective or extremely hazardous product which the writer believes has caused an accident.	writing business letters; discovering available resources

IV. Review and Synthesis Activities

Concept to be Developed	Procedure	Related Skills
	1. Create a "film" or "TV show" starring a particular product. The film may be based on 6 "film frames"--pictures which: (1) introduce the product; (2) illustrate how to select the product; (3) portray proper use; (4) maintenance; (5) storage; and (6) disposal of the product. The 6 "frames" may be posted in a row on the bulletin board to resemble a film strip, or rolled scroll-like onto sticks to simulate a TV presentation.	
	2. Decorate a bulletin board with a collage of photographs or drawings featuring products, consumers, and environments. Have product safety steps--selection, use, maintenance, storage, disposal--lettered down the sides of the board.	
	3. Have students develop consumer product safety-related crossword puzzles, like the sample included on page 14. Completed puzzles (with answers) may be entered in a volume of safety puzzles. Especially good puzzles may be duplicated and shared with the class.	

CONSUMER PRODUCT SAFETY DIAGNOSTIC QUIZ

1. Do you spend money? Yes _____ No _____

2. What helps you decide to buy a specific item?

_____ advice from others

_____ TV commercials

_____ knowing who is going to use it

_____ amount of money you have

_____ the look or feel of the item

Other reasons: _____

_____

3. Put a check in front of the people you think are consumers:

_____ your parent

_____ the mailman

_____ your doctor

_____ a next-door neighbor

_____ you

_____ the President of the United States

_____ the school principal

_____ your teacher

4. Check the consumer products in your home that you have bought or have helped your parents to buy:

_____ swimming pools

_____ bicycles

_____ chairs/tables

_____ matches

_____ toys

_____ kitchen ranges

_____ baby cribs

_____ swings/sliding boards

_____ clothing

_____ lawn mowers

_____ skates

_____ televisions

_____ glass doors/windows

_____ baseball/football equipment

_____ paints

_____ drain cleaners

_____ toasters

_____ skateboards

5. What do you or your parents do with instructions that come with products?

_____ read them and throw them away

_____ ignore them

_____ read them each time you use the product

_____ keep them in a drawer and use them occasionally

6. Can injuries associated with consumer products be reduced?

yes _____ no _____

7. Check any injuries associated with consumer products which you or someone you know has received:

_____ cuts or scratches

_____ fractures

_____ poisonings

_____ burns

_____ electric shocks

_____ sprains

_____ bruises

8. Match the consumer products with the injuries. (More than one product may be associated with an injury.)

cuts _____

fractures _____

burns _____

sprains _____

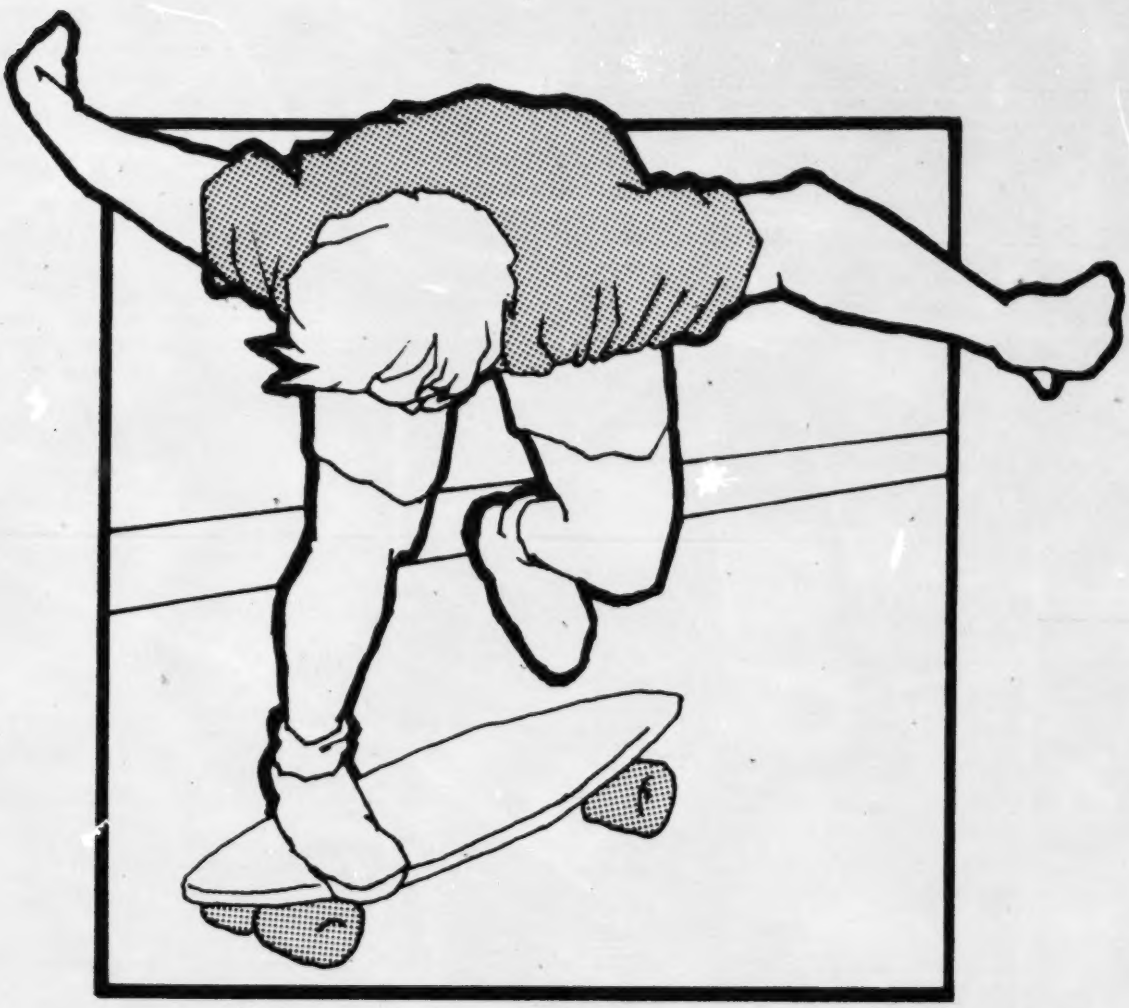
poisonings _____

bruises _____

drownings _____

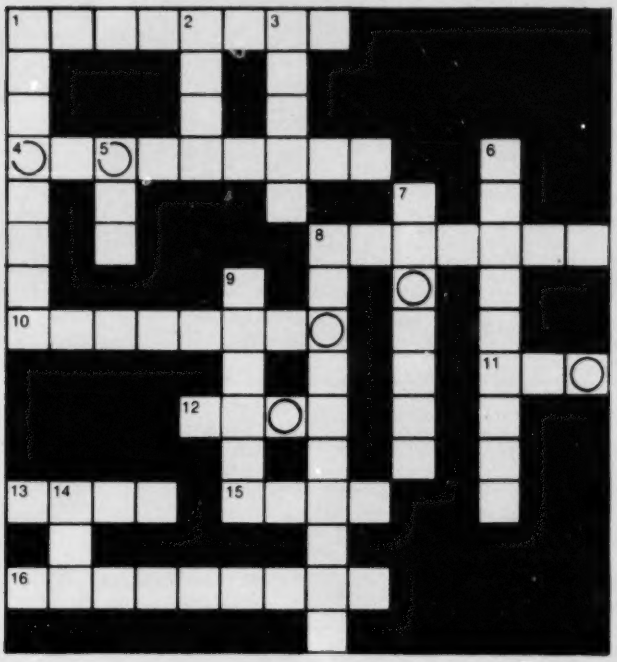
electric shocks _____

1. drain cleaners, furniture polishes
2. matches, ovens and ranges
3. toys
4. skates, skateboards
5. swimming pools
6. stairs, porches
7. playground equipment
8. extension cords
9. lawn mowers, hedge trimmers
10. football and baseball equipment



CONSUMER PRODUCT SAFETY CROSSWORD PUZZLE

(Sample)



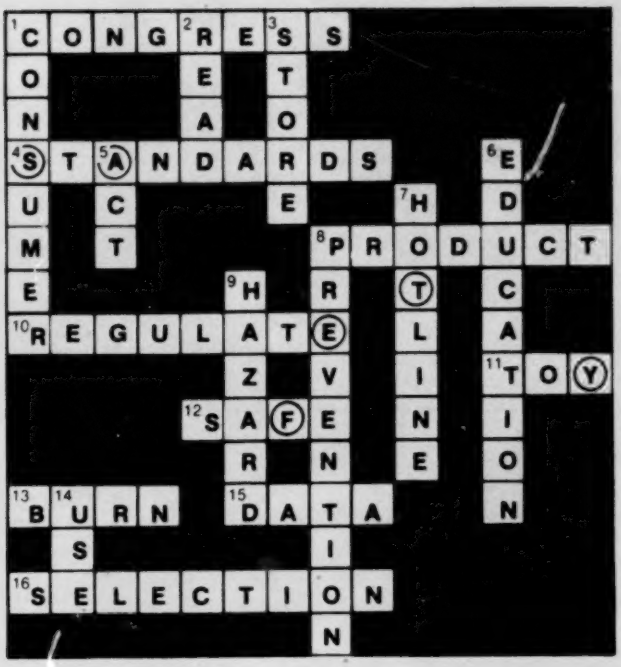
Across

1. U.S. lawmaking body which established the CPSC in 1972
4. Rules for product safety which manufacturers must meet
8. Merchandise or item used by consumers; answer to a multiplication problem
10. To control or direct according to a rule
11. Child's plaything (which must be checked for safety)
12. Free from danger or risk
13. To hurt skin as a result of heat or fire
15. The factual information which scientists collect through observation and experimentation
16. The choice of a product based on use, user, purpose, and environment

Down

1. User of product
2. What we must do with instructions before using a product
3. To put a product safely away until it is needed again
5. The Consumer Product Safety _____; a law passed by Congress to protect consumers
6. Schools and teachers provide this
7. Special phone number you can call for consumer product information
8. What consumer product safety is all about; keeping accidents from occurring.
9. A danger, risk, or chance of injury
14. To employ or work with a product

Answer Key


1 C O N G 2 R E 3 S S
O E T
N A O
4 S T 5 A N D A R D S 6 E
U C E 7 H D
M T 8 P R O D U C T
E 9 H R T C
10 R E G U L A T E L A
Z V I 11 T O Y
12 S A F E N I
R N E O
13 B 14 U R N 15 D A T A N
S I
16 S E L E C T I O N
N

A Consumer Product Safety Vocabulary List

BAN--to prohibit the manufacture, distribution, or sale of a consumer product. When no safety standard can adequately protect the public from an unreasonable risk of injury associated with a consumer product, the product may be banned.

CONSUMER PRODUCT--This term is defined in the Consumer Product Safety Act (CPSA) to mean any article or component of an article that is produced or distributed for sale to or use by consumers in or around homes, schools, recreation areas, or otherwise. Under the CPSA, the term "consumer product" does not include food, drugs, medical devices, cosmetics, tobacco and tobacco products, motor vehicles and motor vehicle equipment, aircraft, aircraft engines, pesticides, firearms, ammunition, or boats and vessels.

CONSUMER PRODUCT SAFETY--the reduction and/or elimination of the risks of injury associated with products used by consumers in the home, school, and community.

DISPOSAL--discarding a product that is no longer used, needed, or wanted in a manner which prevents the product from becoming a potential hazard; for example, separating burnable from nonburnable trash, keeping trash disposal containers tightly covered; discarding medicines when they are no longer necessary by flushing them down the drain and rinsing the containers; and putting oily materials in sealed, metal containers.

ENVIRONMENTAL FACTORS--external conditions and influences which contribute to or affect the occurrence of an accident. Icy walkways, poor lighting, or inadequate ventilation are examples of environmental factors which may contribute to an accident situation.

MAINTENANCE--Repair and Retrofit--keeping the product in safe working order to minimize the risk of injury. Proper maintenance involves inspecting product parts that may need replacing because they are worn. Repair implies restoring the product, as nearly as possible, to its original state to insure continued safety; "retrofitting" is upgrading a product to meet contemporary performance and/or safety standards (i.e., adapting a product to reduce the risk of injury during use.)

PRODUCT HAZARD--a characteristic causing danger, peril, risk or difficulty, and involving a significant threat of physical injury and/or death.

REGULATION--Federal agencies issue mandatory rules to implement laws enacted by Congress. The CPSC establishes regulations which include standards for products, bans of products, and labeling rules for products.

RISK OF INJURY--exposure to the chance of damage or physical impairments such as loss of limbs, bodily hurt, or death.

SAFETY--freedom from the occurrence of hurt, danger, injury, or risk.

SELECTION--making a decision on safety in a product--the brand, quality, and performance. Selection involves the *why* of doing something; *who* is using the product; *where* it will be used; *how* it is to be used; and *what* are its potential hazards.

STANDARD--a requirement as to the performance, composition, contents, design, construction, finish, or packaging of a consumer product. A standard may also require that a consumer product be marked with or accompanied by clear, adequate warnings or instructions for use.

STORAGE--protecting the product to keep it safe; improper storage can affect a product's performance and cause it to be dangerous. Storage can also involve putting the product away to use at a later time, even hiding it to make certain that it does not fall into the wrong hands, e.g., a child's.

USE--the union of product and user. Accidents usually occur in the interaction between the user and the product. One key to product safety is proper use: for example, reading all labels and instruction manuals carefully; using the product only for its intended purpose and in the right environment; using proper protective devices when necessary; instructing and supervising the young and the elderly in the product's use; remembering to clear the work area; wearing proper clothing; not working in haste; and avoiding fatigue.

RESOURCE MATERIALS PUBLISHED BY THE U.S. CONSUMER PRODUCT SAFETY COMMISSION

I. Written Materials

Up to 10 copies of Fact Sheets and certain other publications generally can be obtained without charge from the U.S. Consumer Product Safety Commission, Washington, D.C. 20207. More than 10 copies are available for sale from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO stock numbers and prices appear in parentheses following each publication listing.

Federal Consumer-Oriented Agencies (Fact Sheet No. 52) (#052-011-00050-7; $3.65 for 50 copies)

Generic Hazards (Technical Fact Sheet No. 3) (#052-011-00086-8; $2.60 for 50 copies)

Misuse of Consumer Products (Fact Sheet No. 68) (#052-011-00065-5; $1.75 for 50 copies)

Why Doesn't Somebody Do Something? Brochure describes the basic responsibilities of the Commission. (#052-003-00034-2; $0.35 for 1 copy)

II. Audio-Visual Materials

Audio-visual materials are available on free loan from the 26 regional outlets of Modern Talking Pictures, Inc. Some audio-visuals also are available from CPSC Area Offices. Listings of Modern Talking Pictures, Inc. outlets and the locations of CPSC Area Offices follow.

A Safer Bike: 34 color slides with cassette tape. Describes bicycle safety from a child's viewpoint. Points out safety tips and features that a consumer should be aware of and use properly. For general audiences.

People Make It Happen: (23 min. filmograph--16mm, color, sound) Describes selection, use, maintenance, storage and disposal of consumer products in order to teach safety with many products. This fast-paced, animated film is designed for the general audience and is especially useful as an educational tool for children.

People Make It Happen: Roger Retrofit, Part I. (2 min. filmograph--16mm, color, sound) A mythical, animated hero named Roger Retrofit is used as a focal point for product safety retrofitting. Roger R. describes the mission--to bring consumer products up to today's safety standards--to his gang of Retrofit Rangers. He uses bicycle retrofitting as an example. This film is designed primarily for children.

People Make It Happen: Roger Retrofit, Part II. (1-1/2 min. filmograph--16mm, color, sound) In part II, the principles of retrofitting are dealt with by Roger Retrofit and his Retrofit Rangers in more detail. Designed primarily for children.

People Make It Happen: Roger Retrofit, Part III. (3 min. filmograph--16mm, color, sound) Roger continues in Part III to describe the details of playground retrofitting and to urge his "retrofitters" to spread the principles of product safety to the homes, schools, and recreation areas of America. Designed primarily for children.

Play Happy, Play Safely: 56 color cartoon slides with cassette tape. Presents specific safe play habits and playground hazards. The slides are best used with the curriculum guide. For use with pre-schoolers through age 12.

Recognizing Toy Hazards: 30 color slides with cassette tape. Outlines toy hazards and how to buy and use toys with safety. For general audiences.

Safe Is Better: 80 color slides with cassette tape. Describes the functions of the Commission and the Federal acts it administers. For general audiences. Also available as a sound filmstrip.

MODERN TALKING PICTURE OUTLETS

Atlanta, Georgia 30336
4705-F Bakers Ferry Road
(404) 696-2025

Boston, Massachusetts
230 Boylston Street
Chestnut Hill, Massachusetts 02167
(617) 527-4184

Buffalo, New York 14202
122 West Chippewa Street
(716) 853-1805

Cedar Rapids, Iowa 52404
200 Third Avenue, S.W.
(319) 363-8144

Charlotte, North Carolina 28202
503 North College Street
(704) 377-2574

Chicago, Illinois
1687 Elmhurst Road
Elk Grove Village, Illinois 60007
(312) 593-3250

Cincinnati, Ohio 45202
9 Garfield Place
(513) 421-2516

Cleveland, Ohio 44115
2238 Euclid Avenue
(216) 621-9469

Dallas, Texas 75207
1411 Slocum Street
(214) 742-4106

Denver, Colorado 80204
1200 Stout Street
(303) 573-7300

Detroit, Michigan 48235
15921 W. 8 Mile Road
(313) 273-2070

Harrisburg, Pennsylvania 17105
2009 North Third Street
Post Office Box 3035
(717) 238-8123

Honolulu, Hawaii 96813
716 Cooke Street
(808) 536-9105

Houston, Texas 77027
4084 Westheimer Road
(713) 622-3841

Indianapolis, Indiana 46204
115 East Michigan Street
(317) 635-5331

Los Angeles, California 90038
1145 N. McCadden Place
(213) 469-8282

Milwaukee, Wisconsin 53202
1696 North Astor Street
(414) 271-0861

Minneapolis, Minnesota 55420
9129 Lyndale Avenue S.
(612) 884-5383

New Hyde Park, New York 11040
2323 New Hyde Park Road
(516) 437-6300

Philadelphia, Pennsylvania 19107
1234 Spruce Street
(215) 545-2500

Pittsburgh, Pennsylvania 15222
910 Penn Avenue
(412) 471-9118

St. Louis, Missouri
86 Weldon Parkway
Maryland Heights, Missouri 63043
(314) 567-4278

San Francisco, California 94105
149 Montgomery Street
(415) 543-4075

Seattle, Washington 98103
1205 North 45th Street
(206) 632-8461

Summit, New Jersey 07901
315 Springfield Avenue
(201) 277-6300

Washington, D.C. 20036
2000 "L" Street, N.W., Room 107
(202) 659-9234

AREA OFFICES

HEADQUARTERS
1111 18th St. N.W.
Washington, D.C. 20207

BETHESDA OFFICE
5401 Westbard Avenue
Bethesda, Maryland 20207

Toll-Free Hotline
800-638-8326

Maryland Only
800-492-8363

Alaska, Hawaii, Puerto Rico, and Virgin Islands residents, call **800-638-8333.**

A teletype for the deaf is available, from 8:30 a.m. to 5:00 p.m., for people who call the hotline.

ATLANTA AREA OFFICE

Consumer Product Safety Commission
1330 West Peachtree Street, N.W.
Atlanta, Georgia 30309
404-881-2231
(Ala., Fla., Ga., Ky., Miss., N.C., S.C., Tenn.)

BOSTON AREA OFFICE

Consumer Product Safety Commission
100 Summer Street, Room 1607
Boston, Massachusetts 02110
617-223-5576
(Conn., Mass., Me., N.H., R.I., Vt.)

CHICAGO AREA OFFICE

Consumer Product Safety Commission
230 South Dearborn St., Room 2945
Chicago, Illinois 60604
312-353-8260
(Ill., Ind.)

CLEVELAND AREA OFFICE

Consumer Product Safety Commission
Plaza Nine Bldg., Room 520
55 Erieview Plaza
Cleveland, Ohio 44114
216-522-3886
(Ohio, Mich.)

DALLAS AREA OFFICE

Consumer Product Safety Commission
1100 Commerce St., Room 1 C 10,
Dallas, Texas 75242
214-749-3871
(Ark., La., Okla., N.Mex., Tex.)

DENVER AREA OFFICE

Consumer Product Safety Commission
Guaranty Bank Building, Suite 938
817 17th Street
Denver, Colorado 80202
303-837-2904
(Colo., Mont., N. Dak., S. Dak., Ut., Wyo.)

KANSAS CITY AREA OFFICE

Consumer Product Safety Commission
Traders National Bank Building, Suite 1500
1125 Grand Avenue
Kansas City, Missouri 64106
816-374-2034
(Ia., Kan., Mo., Neb.)

LOS ANGELES AREA OFFICE

Consumer Product Safety Commission
3660 Wilshire Boulevard, Suite 1100
Los Angeles, California 90010
213-688-7272
(S. Cal., Ariz.)

NEW YORK AREA OFFICE

Consumer Product Safety Commission
6 World Trade Center
Vesey Street, 6th Floor
New York, New York 10048
212-264-1125
(N.J., N.Y., P.R., Vir. Is.)

PHILADELPHIA AREA OFFICE

Consumer Product Safety Commission
400 Market Street, 10th Floor
Philadelphia, Pennsylvania 19106
215-597-9105
(Del., Dist. of Col., Md., Pa., Va., W. Va.)

SAN FRANCISCO AREA OFFICE

Consumer Product Safety Commission
100 Pine Street, Suite 500
San Francisco, California 94111
415-556-1816
(N. Cal., Hi., Nev.)

SEATTLE AREA OFFICE

Consumer Product Safety Commission
3240 Federal Building
915 Second Avenue
Seattle, Washington 98174
206-442-5276
(Alas., Ida., Ore., Wash.)

TWIN CITIES AREA OFFICE

Consumer Product Safety Commission
Metro Square, Suite 580
7th and Robert
Saint Paul, Minnesota 55101
612-725-7781
(Mn., Wis.)